इंटरनेट मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”
Mazdoor Kisan Shakti Sangathan
“The Right to Information, The Right to Live”

“पुराने को छोड नये के तरफ”
Jawaharlal Nehru
“Step Out From the Old to the New”

IS 10006 (1981): Grading for Nahor Kernels for Oil Milling
[FAD 13: Oils and Oilseeds]

“ज्ञान से एक नये भारत का निर्माण”
Satyanarayan Gangaram Pitroda
“Invent a New India Using Knowledge”

Act Number 22 of 2005
The Indian Parliament
RIGHT TO INFORMATION

Made Available By
Public.Resource.Org

“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”
Bhartṛhari—Nītiśatakam
“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE

BRUTUM FULMEN

IGNORANTIA
JURIS
NON EXCUSAT

PROTECTED BY COPYRIGHT

IS : 10006 - 1981
(Reaffirmed 2003)

Indian Standard

GRADING FOR *NAHOR* KERNELS FOR OIL MILLING

UDC 633·852·62 *NAHOR*:620·168

© *Copyright* 1982

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

~~Price Rs 5·00~~ Gr 2

April 1982

Indian Standard

GRADING FOR *NAHOR* KERNELS FOR OIL MILLING

Oils and Oilseeds Sectional Committee, CAFDC 5

Chairman	*Representing*
PROF M. M. CHAKRABARTY	Oil Technologists' Association of India, Kanpur
Members	
PROF A. C. GUPTA (*Alternate* to Prof M. M. Chakrabarty)	
SHRI S. N. AGARWAL	Central Organization for Oil Industry and Trade, Bombay
SHRI H. P. GUPTA (*Alternate*)	
AGRICULTURAL MARKETING ADVISER TO THE GOVERNMENT OF INDIA	Directorate of Marketing and Inspection, Nagpur
SHRI T. V. MATHEW (*Alternate*)	
SHRI J. A. ASHTAPUTRE	Ministry of Defence (DGI)
SHRI P. N. AGARWAL (*Alternate*)	
SHRI N. K. BAJAJ	Indian Vanaspati Producers' Association, New Delhi
DR B. P. BALIGA	Tata Oil Mills Co Ltd, Bombay
DR N. L. MURTY (*Alternate*)	
SHRI M. A. BHATT	Swastik Household and Industrial Products Ltd, Bombay
SHRI C. R. KRISHNAMURTHY (*Alternate*)	
DR N. V. BRINGI	Hindustan Lever Ltd, Bombay
SHRI K. BALAKRISHNAN (*Alternate*)	
SHRI D. S. CHADHA	Central Committee for Food Standards (Ministry of Health and Family Welfare), New Delhi
SHRIMATI DEBI MUKHERJEE (*Alternate*)	
SHRI N. C. CHATTERJEE	National Test House, Calcutta
SHRI S. P. GUPTA	Kusum Products Ltd, Rishra
SHRI A. R. N. KULU (*Alternate*)	
SHRI B. V. KANTAK	Godrej Soaps Ltd, Bombay
SHRI M. S. THAKUR (*Alternate*)	
SHRI S. KRISHNAMURTHY	Khadi and Village Industries Commission, Bombay
SHRI V. LAKSHMIKANTHAN (*Alternate*)	
DR G. LAKSHMINARAYANA	Regional Research Laboratory (CSIR), Hyderabad
DR A. S. PANTULU (*Alternate*)	
DR S. K. MUKHERJEE	Indian Agricultural Research Institute (ICAR), New Delhi

(*Continued on page* 2)

© *Copyright* 1982
INDIAN STANDARDS INSTITUTION
This publication is protected under the *Indian Copyright Act* (XIV of 1957) and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

(*Continued from page* 1)

Members	*Representing*
SHRI J. P. PATEL	Italab Pvt Ltd, Bombay
SHRI J. C. DEV (*Alternate* I)	
SHRI S. S. HONAVAR (*Alternate* II)	
DR N. S. RAJAGOPAL	Directorate of Vanaspati, Vegetable Oils and Fats (Ministry of Civil Supplies), New Delhi
DR M. K. KUNDU (*Alternate*)	
SHRI S. RAMASWAMY	Directorate General of Technical Development, New Delhi
SHRI S. N. AGGARWAL (*Alternate*)	
SHRI P. RAMDAS	Central Warehousing Corporation, New Delhi
SHRI A. S. SAMPATH KUMAR (*Alternate*)	
DR Y. R. RAO	Regional Research Laboratory (CSIR), Bhubaneshwar
DR M. BAPUJI (*Alternate*)	
REPRESENTATIVE	Indian Council of Medical Research, New Delhi
DR B. R. ROY	Central Food Laboratory, Calcutta
SHRI P. K. SEN	Vanaspati Manufacturers' Association of India, Bombay
SHRI RAJ KAPILA (*Alternate*)	
SHRI S. C. SINGHAL	D. C. M. Chemical Works, New Delhi
SHRI V. K. BANSAL (*Alternate*)	
SHRI G. V. SIRUR	Solvent Extractors' Association of India, Bombay
SHRI L. KRISHAN KUMAR (*Alternate*)	
DR (SMT) KAMLA SOHNIE	Consumer Guidance Society of India, Bombay
SHRI S. D. THIRUMALA RAO	Oil Technological Research Institute, Anantapur
SHRI D. ATCHYUTA RAMAYYA (*Alternate*)	
SHRI M. D. WASNIK	Directorate of Oilseeds Development, Hyderabad
DR HARI BHAGWAN, Director (Chem)	Director General, ISI (*Ex-officio Member*)

Secretaries

SHRI R. K. SINGH
Deputy Director (Chem), ISI

SHRI M. MUKHOPADHYAY
Deputy Director (Chem), ISI

Oilseeds Subcommittee, CAFDC 5:5

Members	
AGRICULTURAL MARKETING ADVISER TO THE GOVERNMENT OF INDIA	Directorate of Marketing & Inspection (Ministry of Agriculture), Nagpur
SHRI T. V. MATHEW (*Alternate*)	
DR I. J. ANAND	Indian Agricultural Research Institute, New Delhi
SHRI S. S. BAL	National Seeds Corporation Ltd, New Delhi
DR K. S. R. K. SHANKARA RAO (*Alternate*)	

(*Continued on page* 6)

Indian Standard

GRADING FOR *NAHOR* KERNELS FOR OIL MILLING

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 16 November 1981, after the draft finalized by the Oils and Oilseeds Sectional Committee had been approved by the Chemical Division Council and the Agricultural and Food Products Division Council.

0.2 *NAHOR* kernels are obtained from seeds of *NAHOR* (*Mesua ferrea* Linn.) tree. *NAHOR* trees grow in large number in the evergreen forests of Assam, West Bengal, Western Ghats, Karnataka, Tamil Nadu, Kerala and Andamans. In the cultivated condition, it is found chiefly as an ornamental tree under various local names. The flowering season of the tree is February to March which extends up to April and May in some places. The fruits are borne two months later. The fruit is 25 to 30 mm long, void or hemispherical, reddish in colour and it contains 1 to 4 seeds.

0.3 *NAHOR* seed kernels ore rich in oil having 55 to 77 percent oil of yellow to brown colour with an unpleasant pungent odour. The oil is used, at present, mostly for lighting purposes. The oil is suitable for soap making but the odour and colour of the oil are imparted to the soap. It may, however, be properly utilized for soap making after processing. The oil is said to have some medicinal properties also.

0.4 The requirements for oil obtained from *NAHOR* kernels is covered in 'IS:8896-1978*.

0.5 In the preparation of this standard substantial assistance has been derived from the data supplied by Khadi and Village Industries Commission, Bombay which is thankfully acknowledged.

0.6 This standard contains clause **5.1** which calls for an agreement between the purchaser and the supplier.

0.7 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS :2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

---

*Specification for *NAHOR* oil.

†Rules for rounding off numerical values (*revised*).

1. SCOPE

1.1 This standard prescribes requirements and methods of sampling and test for grading of *NAHOR* kernels for oil milling.

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given in **2** of IS:3579-1966* shall apply.

3. GRADES

3.1 The material shall be of two grades, namely, Grade 1 and Grade 2.

4. REQUIREMENTS

4.1 The material shall be obtained from the seeds of the fruit borne on *NAHOR* (*Mesua ferrea* Linn.) tree.

4.2 The material shall not emit any foul odour.

4.3 The material shall also comply with the requirements given in Table 1.

5. PACKING

5.1 The material shall be packed in clean, dry, sound, single, new or unmended B-Twill bags or as agreed to between the purchaser and the supplier.

6. MARKING

6.1 The bags containing the material shall be marked with the following particulars:

a) Name and grade of the material,
b) Net mass of the material in bags,
c) The year of the crop, and
d) The source of supply.

7. SAMPLING

7.1 Representative samples of the material shall be drawn as prescribed in IS:4115-1967†.

---

*Methods of test for oilseeds.

†Methods for sampling of oilseeds.

TABLE 1 REQUIREMENTS FOR *NAHOR* KERNELS FOR OIL MILLING

(*Clauses* 4.3 *and* 8.1)

Sl No.	Characteristic	Requirements for		Method of Test, Ref to Cl No. in IS:3579-1966*
		Grade 1	Grade 2	
(1)	(2)	(3)	(4)	(5)
i)	Damaged, slightly damaged, weevilled and dark seeds, percent by mass, *Max*	4	12	4
ii)	Impurities, percent by mass, *Max*	2·5	10	
iii)	Other oilseeds, percent by mass, *Max*	To be reported		
iv)	Shrivelled, immature and dead seed, percent by mass, *Max*	2	25	
v)	Total of (i) to (iv)	7	35	—
vi)	Moisture content, percent by mass, *Max*	8	15	5.1
vii)	Oil content, percent by mass, *Min*	75	55	5.2
viii)	Acid value of extracted oil, *Max*	10	20	5.3

*Methods of test for oilseeds.

8. TESTS

8.1 Tests shall be carried out according to the methods prescribed in IS:3579-1966*. Reference to the relevant clauses of that standard are given in col 5 of Table 1.

8.2 Quality of Reagents — Unless specified otherwise, pure chemicals and distilled water (*see* IS:1070-1977†) shall be used in tests.

NOTE — 'Pure chemicals' shall mean chemicals, that do not contain impurities which affect the results of analysis.

---

*Methods of test for oilseeds.

†Specification for water for general laboratory use (*second revision*).

(*Continued from page* 2)

Members	*Representing*
Shri Hotchand Bhojumal	The Central Organization for Oil Industry and Trade, Bombay
Shri B. K. Swaika (*Alternate*)	
Shri N. K. Gulati	Inspector General of Forests, New Delhi
Shri B. K. Sharma (*Alternate*)	
Dr S. K. Jain	Botanical Survey of India, Calcutta
Dr V. Mudgal (*Alternate*)	
Dr G. Lakshminarayana	Regional Research Laboratory (CSIR), Hyderabad
Shri V. Krishna Moorthi (*Alternate*)	
Shri R. R. Mussadi	East India Oil Millers' Association, Calcutta
Shri H. P. Gupta (*Alternate*)	
Dr G. B. Rajale	The Tata Oil Mills Co Ltd, Bombay
Dr G. S. Sabnis (*Alternate*)	
Shri P. Ramdas	Central Warehousing Corporation, New Delhi
Shri A. S. Sampath Kumar (*Alternate*)	
Dr M. V. Reddy	Indian Council of Agricultural Research, New Delhi
Dr N. Sen	Hindustan Lever Ltd, Bombay
Shri K. Balakrishnan (*Alternate*)	
Shri M. Kantharaj Urs	Central Food Technological Research Institute (CSIR), Mysore
Dr D. P. Sen (*Alternate*)	
Shri M. D. Wasnik	Directorate of Oilseeds Development (Ministry of Agriculture), Hyderabad
Dr R. N. Mohonty (*Alternate*)	

Panel for Drafting Specifications for Oilseeds, CAFDC 5:5:1

Convener	
Shri V. Lakshmikanthan	Khadi & Village Industries Commission, Bombay

Members	
Agricultural Marketing Adviser to The Government of India	Directorate of Marketing & Inspection (Ministry of Agriculture), Nagpur
Shri T. V. Mathew (*Alternate*)	
Shri D. S. Chadha	Central Committee for Food Standards (Ministry of Health and Family Welfare), New Delhi
Shrimati Debi Mukherjee (*Alternate*)	
Dr G. Lakshminarayana	Regional Research Laboratory (CSIR), Hyderabad
Representative	Swastik Household & Industrial Products Ltd, Bombay
Shri M. D. Wasnik	Directorate of Oilseeds Development, Hyderabad
Dr R. N. Mohonty (*Alternate*)	

INDIAN STANDARDS

ON

OILSEEDS (GRADING)

IS:	
3579-1965	Methods of test for oil seeds
4115-1967	Methods of sampling of oil seeds
4427-1967	Grading for groundnut kernels for oil milling and for table use
4428-1967	Grading for mustard seeds for oil milling
4429-1967	Grading for sesame seeds for oil milling
4617-1968	Grading for linseed for oil milling
4618-1968	Grading for castor seeds for oil milling
4619-1968	Grading for *MAHUA* kernels for oil milling
4620-1968	Grading for cotton seeds for oil milling
5292-1969	Grading for safflower seeds for oil milling
5293-1969	Grading for niger seeds for oil milling
5294-1969	Grading for *KUSUM* seeds for oil milling
5684-1970	Code of practice for handling and storage of oil seeds
6220-1971	Grading for copra for table use and for oil milling
7787-1975	Grading for *NEEM* kernels and dipulped *NEEM* seeds for oil milling
7797-1975	Grading for *SOYBEANS* for oil milling
7798-1975	Grading for sunflower seeds for oil milling
8428-1977	Grading for *KARANJA* seeds for oil milling
8443-1977	Grading for tobacco seeds for oil milling
8557-1977	Grading for *KOKUM* kernels for oil milling
8882-1978	Grading for *KHAKAN* fat for oil milling
9993-1981	Grading for *DHUPA* kernels for oil milling
10006-1981	Grading for *NAHOR* kernels for oil milling

INDIAN STANDARDS INSTITUTION
Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002
Telephones : 26 60 21, 27 01 31 **Telegrams : Manaksanstha**

Regional Offices:

			Telephone
Western :	Novelty Chambers, Grant Road	BOMBAY 400007	37 97 29
Eastern :	5 Chowringhee Approach	CALCUTTA 700072	27 50 90
Southern :	C.I.T. Campus, Adyar	MADRAS 600020	41 24 42
Northern :	B69, Phase VII	S.A.S. NAGAR (MOHALI) 160051	—

Branch Offices:

'Pushpak', Nurmohamed Shaikh Marg, Khanpur	AHMADABAD 380001	2 03 91
'F' Block, Unity Bldg, Narasimharaja Square	BANGALORE 560002	2 76 49
Gangotri Complex, Bhadbhada Road, T.T.Nagar	BHOPAL 462003	6 27 16
22E Kalpana Area	BHUBANESHWAR 751014	5 36 27
5-8-56C L. N. Gupta Marg	HYDERABAD 500001	22 10 83
R14 Yudhister Marg, C Scheme	JAIPUR 302005	6 98 32
117/418B Sarvodaya Nagar	KANPUR 208005	4 72 92
Patliputra Industrial Estate	PATNA 800013	6 28 08
Hantex Bldg (2nd Floor), Rly Station Road	TRIVANDRUM 695001	32 27

Printed at Britannia Calendar Mfg Co, Calcutta, India